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PATENT APPLICATION TRANSMITTAL

Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	JJM-475
First Named Inventor or Application Identifier	Ronald Legerstee
Express Mail Label No.	EE226056135US

APPLICATION ELEMENTS

See MPEP Chapter 600 concerning utility patent application contents.

ADDRESS TO: Assistant Commissioner for Patents
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Washington, DC 20231

1. ☒ Fee Transmittal Form *(attached hereto in duplicate)*
2. ☒ Specification [Total Pages 29]
(Preferred arrangement set forth below)
- Descriptive Title of the Invention
- Cross References to Related Applications
- Statement Regarding Fed sponsored R&D
- Reference to Microfiche Appendix
- Background of the Invention
- Brief Summary of the Invention
- Brief Description of the Drawings *(if filed)*
- Detailed Description
- Claim(s)
- Abstract of the Disclosure

3. ☒ Drawing(s)*(35 USC 113)* [Total Sheets 7]
4. Oath or Declaration
   a. ☐ Newly executed (original or copy)
   b. ☒ Unexecuted original
   c. ☐ Copy from a prior application (37 CFR 1.63(d))
   (for continuation/divisional check boxes 5 and 16)
   i. ☐ Deletion of Inventor(s)
   Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
5. ☐ Incorporation by Reference
(useable if Box 4c is checked)
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4c, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.

6. ☐ Microfiche Computer Program (Appendix)
7. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
a. ☐ Computer Readable Copy
b. ☐ Paper Copy (identical to computer copy)
c. ☐ Statement verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

8. ☐ Assignment Papers (cover sheet & document(s))
9. ☐ 37 CFR 3.73(b) Statement *(when there is an assignee)* ☐ Power of Attorney
10. ☐ English Translation Document *(if applicable)*
11. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☒ Copies of IDS Citations
12. ☐ Preliminary Amendment
13. ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
14. ☐ Certified Copy of Priority Document(s)
(if foreign priority is claimed)
15. ☐ Other:

16. ☐ If a CONTINUING APPLICATION, *check appropriate box and supply the requisite information:*
Amend the specification by inserting before the first line: – This is a ☐ Continuation ☐ Divisional ☐ Continuation-in-Part (CIP) of prior application No.: , filed . –
17. For this divisional application, please cancel original Claims of the prior application before calculating the filing fee.

18. CORRESPONDENCE ADDRESS

☐ Customer Number or Bar Code Label or ☒ Correspondence Address below

Name: Audley A. Ciamporcero, Jr., Esq.
Address: Johnson & Johnson
One Johnson & Johnson Plaza
New Brunswick, NJ 08933-7003 USA

19. TELEPHONE CONTACT

Please direct all telephone calls or telefaxes to Theodore J. Shatynski at:
Telephone: (732) 524-2498 Fax: (732) 524-2808

19. SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

NAME	Theodore J. Shatynski	Reg. No. 36676
SIGNATURE	Theodore J. Shatynski	
DATE	October 26, 1999	

DOCKET NO. JJM-475

IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE

Applicant: Ronald Legerstee

For : DEVICE AND METHOD FOR CHRONIC WOUND CONDITION TREATMENT

Express Mail Certificate

"Express Mail" mailing number: EE226056135US

Date of Deposit: October 26, 1999

I hereby certify that this complete application, including specification pages, claims, drawings, petition for acceptance of color drawings, and Declaration and Power of Attorney (unsigned) is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

A Combined Declaration and Power of Attorney will be submitted to the United States Patent and Trademark Office upon receipt of the U.S. Serial Number for this patent application.

Martin Rizzi
(Typed or printed name of person mailing paper or fee)

(Signature of person mailing paper or fee)

DEVICE AND METHOD FOR CHRONIC WOUND CONDITION TREATMENT

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention is concerned with a device and the method of using such device to prescribe a treatment regiment based on the condition of the wound, particularly when the wound is a chronic wound, most particularly pressure ulcers (sores), venous ulcers and diabetic ulcers.

2. Related Art

The healing process of wounds is widely accepted to be categorized into the following four (4) conditions (hereinafter referred to as "healing phase conditions"): (1) necrotic; (2) fibrinous slough or infection; (3) granulation; and (4) epithelialization. The necrotic condition refers to the wound healing phase condition where catabolic processes have been resulting in dead tissue. The fibrinous slough or infection condition refers to the circumstance where the wound is in the inflammatory phase, where dead cellular debris fills the base of the wound with an off-white to yellow layer. The granulation condition refers to the healing phase when the wound has reached the proliferative stage of healing

and when the wound cavity is slowly filled with the "repair-material" of the body which consists of fibro-vascular tissue and is called granulation. The epithelialization condition describes the wound healing phase wherein the keratinocytes (epidermal cells) are dividing and gradually crossing the wound surface from the margins towards the opposite side. Once the cells make contact with each other the cells stop dividing (contact inhibition).

The foregoing healing phase conditions have also been depicted by a widely accepted color classification scheme with the necrotic condition depicted by the color black; the fibrinous slough or infection condition depicted by the color yellow; the granulation condition shown by the color red; and the epithelialization condition depicted by the color pink.

A second condition important in the healing process of the wound is the wound's moisture condition or level (hereinafter referred to as "moisture condition"). It has been identified as early as 1962 (see Winter, "Formation of the Scab and the Rate of Epithelialization in the Skin of the Domestic Pig", Nature; 193: 293-294 (1962) that wound healing occurs faster in a "moist" environment as opposed to a dry or wet environment. If the environment is too dry, it is believed that the wound does not heal as quickly because in a healing wound, most

of the processes involved are driven by cells (e.g., specific leucocytes such as Poly Morpho Nuclear's (PMN's)). These cells need a moist environment to stay alive for their biological work. When the wound is too wet, maceration of the skin cells occurs which cause cell death by the cells literally bursting from taking up too much fluid.

The moisture condition of the wound has also been depicted by color schemes with the color yellow depicting the dry condition (yellow conjuring up the impression of the dryness of the desert); the color blue being used to depict the wet condition (blue conjuring up the image of the wetness of the ocean); and the color green being used to represent the moist condition (green conjuring the likeness of an oasis).

The foregoing healing phase conditions and moisture conditions with the described color schemes and recommended wound treatment have been depicted in graphical form in the copyrighted and trademarked drawing entitled "The Natural Line of Wound Healing" provided by Johnson & Johnson. {See Fig. 6} This conceptual model visualizes the way in which the healing process takes place in chronic wounds. Specifically, the "S-shaped" curve of the graph depicts the healing phase condition of the wound with the lower left-hand part of the curve representing the necrotic phase (darkened area appearing

black); moving along the curve upwards, the yellow region representing the sloughy healing phase; moving yet further up the curve and crossing over the horizontal green line, the red region of the curve representing the granulation healing phase; and continuing up the curve to the pink region representing the epithelialization phase of the wound. Likewise, the wet or macerated condition of a wound is illustrated by the blue region under the horizontal green line. The horizontal green line representing the ideal "moist" wound moisture level. Above the green line, is the dry (dehydrated) region depicted by the color yellow. While this graph provides a useful and illustrative tool in assessing the healing phase and moisture conditions of the wound and prescribing a wound treatment regiment, a more simplified tool was desired.

The present invention makes use of a "slide rule format" as hereinafter described to provide a simple and illustrative method of determining the treatment regiment based on the healing phase condition and moisture condition for the wound.

Slide rule formats have been known to assist in calculations and to produce many things including the manufacture of springs (see U.S. Pat. No. 3,570,757); estimates for concrete mix proportions of air, cement, water, fine and coarse aggregates (see U.S. Pat. No.

3,814,308); guidelines for intravenous therapy (see, U.S. Pat. No. 3,747,847); and for computing hyper-alimentation dosages (see, U.S. Pat. No. 4,189,634). However, Applicants are unaware of the use of any slide rule format based on the healing phase and moisture conditions of chronic wounds for the purpose of following a treatment regiment for such wounds.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 depicts an overview of the device of this invention.

Fig. 2 depicts an enlargement of the device of this invention concerning the treatment regiment for wounds in the necrotic tissue condition;

Fig. 3 depicts an enlargement of the device of this invention concerning the treatment regiment for wounds in the sloughy tissue (or infection) condition;

Fig. 4 depicts an enlargement of the device of this invention concerning the treatment regiment for wounds in the granulation condition;

Fig. 5 depicts an enlargement of the device of this invention concerning the treatment regiment for wounds in the epithelialisation condition;

Fig. 6 depicts a prior art color graphical format for the treatment of chronic wounds based on the healing phase and moisture content of the wound.

Fig. 7 depicts an overall view of the device of this invention in the invention's preferred color scheme.

SUMMARY OF THE INVENTION

This invention relates to a device comprising a sliding member and a fixed member, the sliding member indicative of the moisture condition of a wound and the fixed member indicative of the healing phase condition of a wound and containing instructions as to the wound treatment regiment resulting from the alignment of particular wound moisture condition with a particular wound healing phase condition.

In a preferred embodiment the device comprises:

(a) a base comprising first and second elongated fixed members, the members being spaced to receive a moveable slide;

(b) the moveable slide being located between the two spaced elongated fixed members;

(c) the first of the elongated fixed members separated into regions indicating the healing phase condition of the wound in terms of whether the wound is in the necrotic condition; fibrinous slough or infection condition; granulation condition; or epithelialization condition; each of these healing phase condition regions further containing indicators corresponding to the moisture condition of the wound indicating whether the moisture level of the wound is in the wet condition; moist condition, or dry condition;

(d) the moveable slide being separated into three regions corresponding to the moisture condition of the wound in terms of whether the wound is in the wet condition, moist condition, or dry condition; each of these moisture condition regions further containing wound healing phase indicators corresponding to the healing phase condition of the wound in terms of whether the wound is in the necrotic condition; fibrinous slough or infection condition, granulation condition; or epithelialization condition; and

(e) the second of the elongated fixed members comprising treatment descriptors comprising instructions for wound treatment regiments corresponding to the wound

phase healing and moisture conditions which result from the alignment of the healing and moisture condition indicators of the first elongated fixed member with the healing phase and moisture condition indicators of the moveable slide.

This invention also relates of a method for prescribing a treatment regiment for a wound comprising the steps of:

(a) assessing the wound healing phase condition;

(b) assessing the wound moisture condition;

(c) providing a device comprising at least two fixed members and a sliding member, the first of the fixed members representing the wound healing condition, the sliding member representing the wound moisture condition, and the second of the fixed members comprising wound treatment instructions;

(d) aligning the moisture condition of the sliding member with the wound healing phase condition of the fist fixed member corresponding to the assessed wound healing phase and moisture condition and then prescribing the wound treatment regiment indicated on the second fixed member resulting from the alignment of the sliding member and the first fixed member.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS OF THE INVENTION

Embodiments of the present invention and the advantages thereof are best understood by referring to the following descriptions and drawings, wherein like numerals are used for like and corresponding parts of the drawings.

In a general embodiment, the present invention relates a device comprising a sliding member and a fixed member, the sliding member indicative of the moisture condition of a wound and the fixed member being indicative of the healing phase condition of a wound and containing instructions as to the wound treatment regiment resulting from the alignment of the sliding member's particular wound moisture condition with the fixed member's wound healing phase condition.

Of course, an alternate embodiment is one where the device's sliding member is indicative of the wound's healing phase condition and the fixed number is indicative of the wound's moisture condition. In either embodiment, wound treatment instructions result by aligning the assessed moisture condition and healing phase condition indicators.

Figure 1 is an overall representation of a preferred embodiment of the device 100 of this invention.

Device 100 comprises base 200 comprising a first elongated fixed number 1000 and a second elongated fixed number 3000. A moveable slide 2000 is located between elongated fixed numbers 1000 and 3000.

Elongated fixed number 1000 is separated into four (4) regions indicating the healing phase condition of the wound such as the necrotic tissue condition region 1100; the fibrinous slough or infection condition region 1200; the granulation condition region 1300; and the epithelialization condition region 1400. Each of these four regions contain indicators corresponding to the moisture condition of the healing condition. Thus, necrotic tissue condition region 1100 has indicator 1101 to designate a wet wound, indicator 1102 to indicate a moist wound, and indicator 1103 to indicate a dry wound; the fibrinous slough or infection condition region 1200 has indicator 1201 to indicate a wet wound, indicator 1202 to indicate a moist wound, and indicator 1203 to indicate a dry wound; the granulation condition region 1300 has indicator 1301 to indicate a wet wound, and indicator 1302 to indicate a moist wound, indicator 1303 to indicate a dry wound; and the epithelialization condition region 1400 has indicator 1401 to indicate a

wet wound, indicator 1402 to indicate a moist wound, and indicator 1403 to indicate a dry wound.

In a preferred embodiment the healing phase conditions 1100, 1200, 1300, and 1400 are shaded to indicate the distinctness of the regions, and most preferably the regions are shaded in color, with varying intensities of color as one progresses from the necrotic condition region 1100, depicted by the color black, to the infection condition region 1200 depicted by the color yellow, to the granulation region 1300 depicted by the color red and to the epithelialization region 1400 condition depicted by the color pink.

Also in a preferred embodiment, the indicators of the wound moisture condition are shaded to indicate the distinctness of the wound moisture content wherein the wet condition is indicated by the color blue, the moist condition indicated by the color green, and the dry condition indicated by they color yellow.

In a more preferred embodiment, indicators 1101 to 1103, 1201 to 1203, 1301 to 1303, and 1401 to 1403 are comprised of two side-by-side colored bars indicated by Table 1.

TABLE 1

Indicator	Left Colored Bar	Right Colored Bar
1101	Black	Blue
1102	Black	Green
1103	Black	Yellow
1201	Yellow	Blue
1202	Yellow	Green
1203	Yellow	Yellow
1301	Red	Blue
1302	Red	Green
1303	Red	Yellow
1401	Pink	Blue
1402	Pink	Green
1403	Pink	Yellow

Moveable slide 2000 is separated into three (3) regions corresponding indicating the three moisture conditions of a wound such as the wet condition region 2100, the moist condition region 2200, and the dry condition region 2300. Each of these three regions contain indicators corresponding to the healing condition of the wound. Thus, wet condition region 2100 has indicator 2101 to designate a necrotic wound, indicator 2102 to designate a fibrinous slough or infection condition wound, indicator 2103 to designate a granulating wound, and indicator 2104 to designate an epithelializing wound; moist condition region 2200 has indicator 2201 to designate a necrotic wound, indicator 2202 to designate a infected wound, indicator 2203 to designate a granulating wound, and indicator 2204 to

designate an epithelializing wound; and dry condition region 2300 has indicator 2301 to designate a necrotic wound, indicator 2302 to designate an infected wound, indicator 2303 to designate a granulating wound, and indicator 2304 to designate an epithelializing wound.

In a preferred embodiment, moisture condition regions 2100, 2200, and 2300 are shaded to indicate the distinctness of the regions, and most preferably the regions are shaded in color, with varying intensities of color as one progresses from the wet condition region 2100 depicted by the color blue, to the moist condition region 2200 indicated by the color green, and to the dry condition region 2300 indicated by the color yellow. Additionally, arrows may be placed on movable slide 2000 to direct the user to the ideal moisture level condition of "moist", i.e., region 2200, as depicted in Fig. 1.

Also in a preferred embodiment, the indicators of the wound healing condition are shaded to indicate the distinctness of the wound healing phase condition wherein the necrotic condition is indicated by the color black, the sloughy tissue or infection condition is indicated by the color yellow, the granulating condition is indicated by the color red, and the epithelializing condition is indicated by the color pink.

In a more preferred embodiment, indicators 2101 to 2104, 2201 to 2204, and 2301 to 2304 are comprised of two side-by-side colored bars indicated by TABLE 2.

TABLE 2

Indicator	Left Colored Bar	Right Colored Bar
2101	Black	Blue
2102	Yellow	Blue
2103	Red	Blue
2104	Pink	Blue
2201	Black	Green
2202	Yellow	Green
2203	Red	Green
2204	Pink	Green
2301	Black	Yellow
2302	Yellow	Yellow
2303	Red	Yellow
2304	Pink	Yellow

Elongated fixed member 3000 contains the written description of the wound and prescribed wound treatment regiment based on alignment of the healing and moisture condition of the wound (i.e., from alignment of indicators of fixed member 1000 and movable slide 2000).

In a preferred embodiment fixed number 3000 is separated or contains groupings of wound descriptions and prescribed wound treatment regiments based on the four (4) wound healing phase conditions (i.e., necrotic; fibrinous slough (infection); granulation; and epithelialisation.)

Referring to Fig. 2 which relates to the necrotic tissue condition, fixed member 3000 contains indicators 3101, 3102, and 3103. Indicator 3101 refers to a wound in the necrotic and wet condition and nearby contains treatment descriptor 3110 which describes the healing and moisture condition of the wound along with the prescribed treatment. Thus treatment descriptor 3110 describes the wound as being macerated, recommends the treatment of decreasing moisture level and/or removing necrotic tissue, and recommends particular wound care dressings suitable for such treatment and in this instance Johnson & Johnson wound care dressings of NUGEL (generically, a hydrogel with alginate dressing) with ADAPTIC (generically, a non-adherent impregnated wound dressing) or ALGOSTERIL (generically, a calcium alginate dressing) or when the wound is infected ACTISORB3 (generically, an activated charcoal dressing with silver). Treatment descriptor 3120 located near indicator 3102, describes the wound condition as being OK and recommends debridement of any necrotic tissue along with use of Johnson & Johnson NUGEL and ADAPTIC dressings. Finally, treatment descriptor 3130, located near indicator 3103, describes the necrotic tissue as being dried out and recommends removal of necrotic tissue and dehydration of the wound along with use of Johnson & Johnson NUGEL and ADAPTIC dressing.

In operation, the depiction of Fig. 2 demonstrates the alignment of indicators 1101, 2101 and 3101 which indicate the treatment regiment under treatment descriptor 3110 for a wound in a necrotic healing condition and a wet moisture condition. Similarly, alignment of the other indicators demonstrate appropriate treatment regiment.

Referring to Fig. 3 which relates to the sloughy tissue or infection wound condition, fixed member 3000 contains indicators 3201, 3202, and 3203. Indicator 3201 refers to a wound in the infection and wet condition. Close to indicator 3201 is treatment descriptor 3210 which describes the healing and moisture condition of the wound along with the prescribed treatment. Thus treatment descriptor 3210 describes the wound as being macerated, recommends the treatment of decreasing moisture level and/or cleaning, and recommends wound care dressings suitable for such treatment and in this instance Johnson & Johnson wound care dressings of ALGOSTERIL and when infected ACTISORB3. Treatment descriptor 3220 located near indicator 3202, describes the wound condition as being OK and recommends a treatment aimed at cleansing the wound and in this instance the use of Johnson & Johnson's ALGOSTERIL wound dressing. Finally, treatment descriptor 3230, located near indicator 3203, describes the sloughy tissue as being dried out, recommends

removal of sloughy tissue by rehydration/dissolving, and recommends, in this instance, treatment with Johnson & Johnson NUGEL and ADAPTIC products.

In operation, the depiction of Fig. 3 demonstrates the alignment of indicators 1202, 2202, and 3203 which indicate the treatment regiment for a wound in the sloughy tissue or infection condition and a moist moisture condition. Similarly alignment of the other indicators provide the instructions for the appropriate treatment regiment.

Referring to Fig. 4 which relates to a granulating wound condition, fixed member 3000 contains indicators 3301, 3302, and 3303. Indicators 3301 refers to a wound in the granulation and wet condition. Close to indicator 3301 is treatment descriptor 3310 which describes the healing and moisture condition of the wound along with the prescribed treatment. Thus treatment descriptor 3310 describes the wound as being macerated, recommends the treatment of decreasing moisture level, and recommends suitable wound care dressings suitable for such treatment and in this instance Johnson & Johnson wound care dressings of ALGOSTERIL and/or TIELLE (generically, a semi-permeable hydropolymer dressing). Also, when the wound is infected under this condition, use of Johnson and Johnson's INADINE (generically, a non-adherent, povidone iodine

impregnated wound dressing) wound dressing is recommended. Treatment descriptor 3320 located near indicator 3302, describes the wound condition as being OK and recommends a treatment aimed at protection of granulation tissue of the wound and in this instance the use of Johnson & Johnson's TIELLE and/or ADAPTIC dressings. Finally, treatment descriptor 3330 located near indicator 3303, describes the granulation tissue as being too dry recommends using a semi-occlusive dressing and, in this instance, treatment with a combination of Johnson & Johnson NUGEL and TIELLE products.

In operation, the depiction of Fig. 4 demonstrates the alignment of indicators 1302, 2302, and 3302 which indicates the treatment regiment for a wound in the granulation condition and a moist moisture condition. Similarly alignment of the other indicators provide the instructions for the appropriate treatment regiment.

Referring to Fig. 5 which relates to the epithelialization condition, fixed member 3000 contains indicators 3401, 3402, and 3403. Indicator 3401 refers to a wound in the epithialization and wet condition. Close to indicator 3401 is treatment descriptor 3410 which describes the healing and moisture condition of the wound along with the prescribed treatment. Thus treatment descriptor 3410 describes the wound as being macerated, recommends the treatment of decreasing

moisture level and recommends suitable wound care dressings suitable for such treatment and in this instance Johnson & Johnson wound care dressing of TIELLE. Treatment descriptor 3420 located near indicator 3402, describes the wound condition as being OK and recommends a treatment aimed at protection of the epithelial tissue and in this instance the use of Johnson & Johnson's BIOCLUSIVE (generically, a transparent film dressing) wound dressing. Finally, treatment descriptor 3430, located near indicator 3403, describes the wound surface as being too dry and recommends, in this instance, treatment with Johnson & Johnson's NUGEL, BIOCLUSIVE or ADAPTIC products.

In operation, the depiction of Fig. 5 demonstrates the alignment of indicators 1403, 2403, and 3403 which indicates the treatment regiment for a wound in the epithialising tissue condition and a dry moisture condition. Similarly alignment of the other indicators provide the instructions for the appropriate treatment regiment.

In a preferred embodiment, indicators 3101 to 3103, 3201 to 3203, 3301 to 3303, and 3401 to 3403 are comprised of two side-by-side colored bars indicated by TABLE 3.

TABLE 3

Indicator	Left Colored Bar	Right Colored Bar
3101	Black	Blue
3102	Black	Green
3103	Black	Yellow
3201	Yellow	Blue
3202	Yellow	Green
3203	Yellow	Yellow
3301	Red	Blue
3302	Red	Green
3303	Red	Yellow
3401	Pink	Blue
3402	Pink	Green
3403	Pink	Yellow

Desirably, the device, when using a color scheme contains a color calibration reference to correct for coloring variations resulting from the use of various brands of photographic films as well as different types of light which will give rise to different colors after reproduction. Therefore by using the three basic colors of the spectrum, blue, red, and yellow, during the photographic production of the device, color faults can be corrected for.

Also, the device of this invention may take the form of pocket-sized slide rule or a larger poster-sized

device amenable to instructing potential users of the device.

In a preferred embodiment, the device of this invention contains a graduated measuring scale with which the size of the wound may be determined at the same time that the wound as being assessed for its condition, such a measuring function not only serves as an aid to properly record the size of the wound for histological purposes but also for determining the proper size of the appropriate wound dressing.

It should be understood that the foregoing disclosure and description of the present invention are illustrative and explanatory thereof and various changes in the size, shape and materials as well as in the description of the preferred embodiment may be made without departing from the spirit of the invention.

What is claimed is:

1. A device comprising a sliding member and a fixed member, the sliding member indicative of the moisture condition of a wound and the fixed member indicative of the healing phase condition of a wound and containing instructions as to the wound treatment regiment resulting from the alignment of the sliding member's particular wound moisture condition with the fixed member's particular wound healing phase condition.

2. The device of claim 1, wherein the sliding member is indicative of the wound's healing phase condition and the fixed member is indicative of the wound's moisture condition.

3. A device useful for prescribing a treatment regiment for chronic wounds comprising:

(a) a base comprising first and second elongated fixed members, the members being spaced to receive a moveable slide;

(b) the moveable slide being located between the two spaced elongated fixed members;

(c) the first of the elongated fixed members separated into regions indicating the healing phase

condition of the wound in terms of whether the wound is in the necrotic condition; fibrinous slough or infection condition; granulation condition; or epithelialization condition; each of these healing phase condition regions further containing indicators corresponding to the moisture condition of the wound indicating whether the moisture level of the wound is in the wet condition; moist condition, or dry condition;

(d) the moveable slide being separated into three regions corresponding to the moisture condition of the wound in terms of whether the wound is in the wet condition, moist condition, or dry condition; each of these moisture condition regions further containing wound healing phase indicators corresponding to the healing phase condition of the wound in terms of whether the wound is in the necrotic condition; fibrinous slough or infection condition, granulation condition; or epithelialization condition; and

(e) the second of the elongated fixed members comprising treatment descriptors comprising instructions for wound treatment regiments corresponding to the wound phase healing and moisture conditions which result from the alignment of the healing and moisture condition indicators of the first elongated fixed member with the healing phase and moisture condition indicators of the moveable slide.

4. The device of claim 3, wherein the wound healing phase condition regions are of the first elongated fixed member shaded or colored to distinguish the regions from among themselves.

5. The device of claim 4, wherein the wound moisture condition regions of the movable slide are shaded or colored to distinguish the regions from among themselves.

6. The device of claim 5, wherein the healing phase condition regions have the following coloring scheme of black to depict the necrotic condition, yellow to depict the fibrinous slough or infection condition, red to depict the granulation condition and pink to depict the epithialization condition.

7. The device of claim 6, wherein the wound moisture condition regions have the following coloring scheme of blue to depict a wet wound, green to depict a moist wound, and yellow to depict a dry wound.

8. The device of claim 7, wherein the moisture condition indicators of the first elongated fixed member, the wound healing phase indicators of the moveable slide, and the indicators of the second elongated fixed member are shaded or colored.

9. The device of claim 8, wherein the moisture condition indicators of the first elongated member, the wound healing phase indicators of the sliding member, and the indicators of the second elongated member each individually comprise two side-by-side colored bars.

10. The device of claim 9, wherein the indicators comprise the following left to right color scheme for the indicated wound healing and moisture conditions:

(a) FIRST ELONGATED FIXED MEMBER:

(i) Necrotic Condition:	Left Bar	Right Bar
wet (1101)	black	blue
moist (1102)	black	green
dry (1103)	black	yellow

(ii) Fibrinous Slough/Infection:	Left Bar	Right Bar
wet (1201)	yellow	blue
moist (1202)	yellow	green
dry (1203)	yellow	yellow

(iii) Granulation Condition:	Left Bar	Right Bar
wet (1301)	red	blue
moist (1302)	red	green
dry (1303)	red	yellow

(iv) Epithelialization Condition:	Left Bar	Right Bar
wet (1401)	pink	blue
moist (1402)	pink	green
dry (1403)	pink	yellow;

(b) MOVEABLE SLIDE:

(i) Wet Condition:	Left Bar	Right Bar
necrotic (2101)	blue	black
fibrinous slough/infection (2102)	blue	yellow
granulation (2103)	blue	red
epithelialization (2104)	blue	pink

(ii) Moist Condition:	Left Bar	Right Bar
necrotic (2201)	green	black
fibrinous slough/infection (2202)	green	yellow
granulation (2203)	green	red
epithelialization (2204)	green	pink

(iii) Dry Condition:	Left Bar	Right Bar
necrotic (2201)	yellow	black
fibrinous slough/infection (2202)	yellow	yellow
granulation (2203)	yellow	red
epithelializatoin (2204)	yellow	pink; and

(c) SECOND ELONGATED FIXED MEMBER:

(i) Necrotic Condition:	Left Bar	Right Bar
wet (3101)	black	blue
moist (3103)	black	green
dry (3103)	black	yellow

(ii) Fibrinous Slough/Infection:	Left Bar	Right Bar
wet (3201)	yellow	blue
moist (3202)	yellow	green
dry (3203)	yellow	yellow

(iii) Granulation Condition:	Left Bar	Right Bar
wet (3301)	red	blue
moist (3302)	red	green
dry (3303)	red	yellow

(iv) Epithelialization Condition:	Left Bar	Right Bar
wet (3401)	pink	blue
moist (3402)	pink	green
dry (3403)	pink	yellow.

11. A method for prescribing a treatment regiment for a wound comprising the steps of:

(a) assessing the wound healing phase condition;

(b) assessing the wound moisture condition;

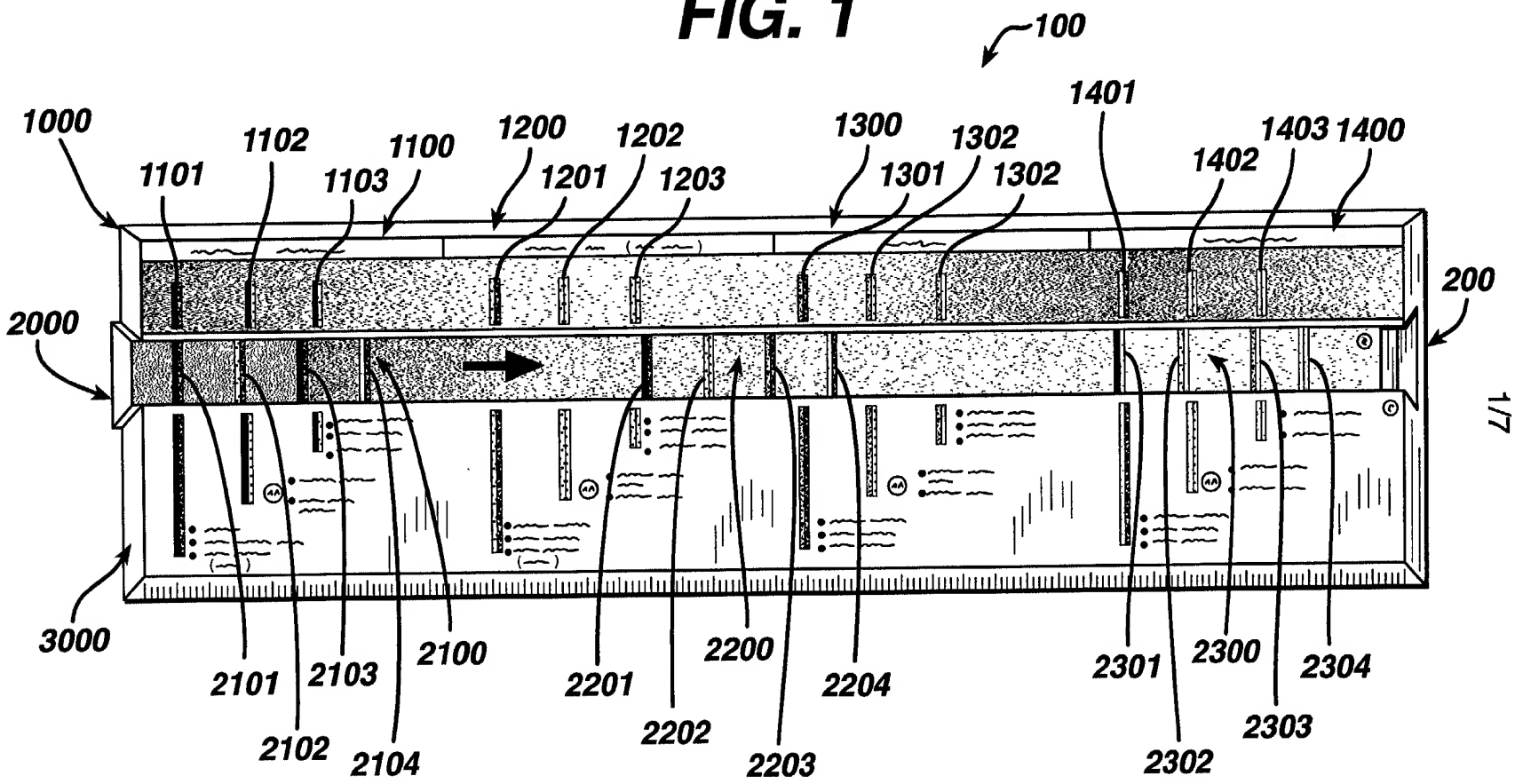
(c) providing a device comprising at least two fixed members and a sliding member, the first of the fixed members representing the wound healing condition, the sliding member representing the wound moisture condition, and the second of the fixed members comprising wound treatment instructions;

(d) aligning the moisture condition of the sliding member with the wound healing phase condition of the fist fixed member corresponding to the assessed wound healing phase and moisture condition and then prescribing the wound treatment regiment indicated on the second fixed member resulting from the alignment of the sliding member and the first fixed member.

ABSTRACT OF THE DISCLOSURE

A device and method for chronic wound treatment is disclosed. The device is in the form of a slide rule which instructs the user regarding a recommended course of treatment based on the healing phase condition and moisture condition of the wound.

FIG. 1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2101
2103
2102
2104
2100
2201
2202
2200
2203
2204
2301
2302
2300
2303
2304

FIG. 2

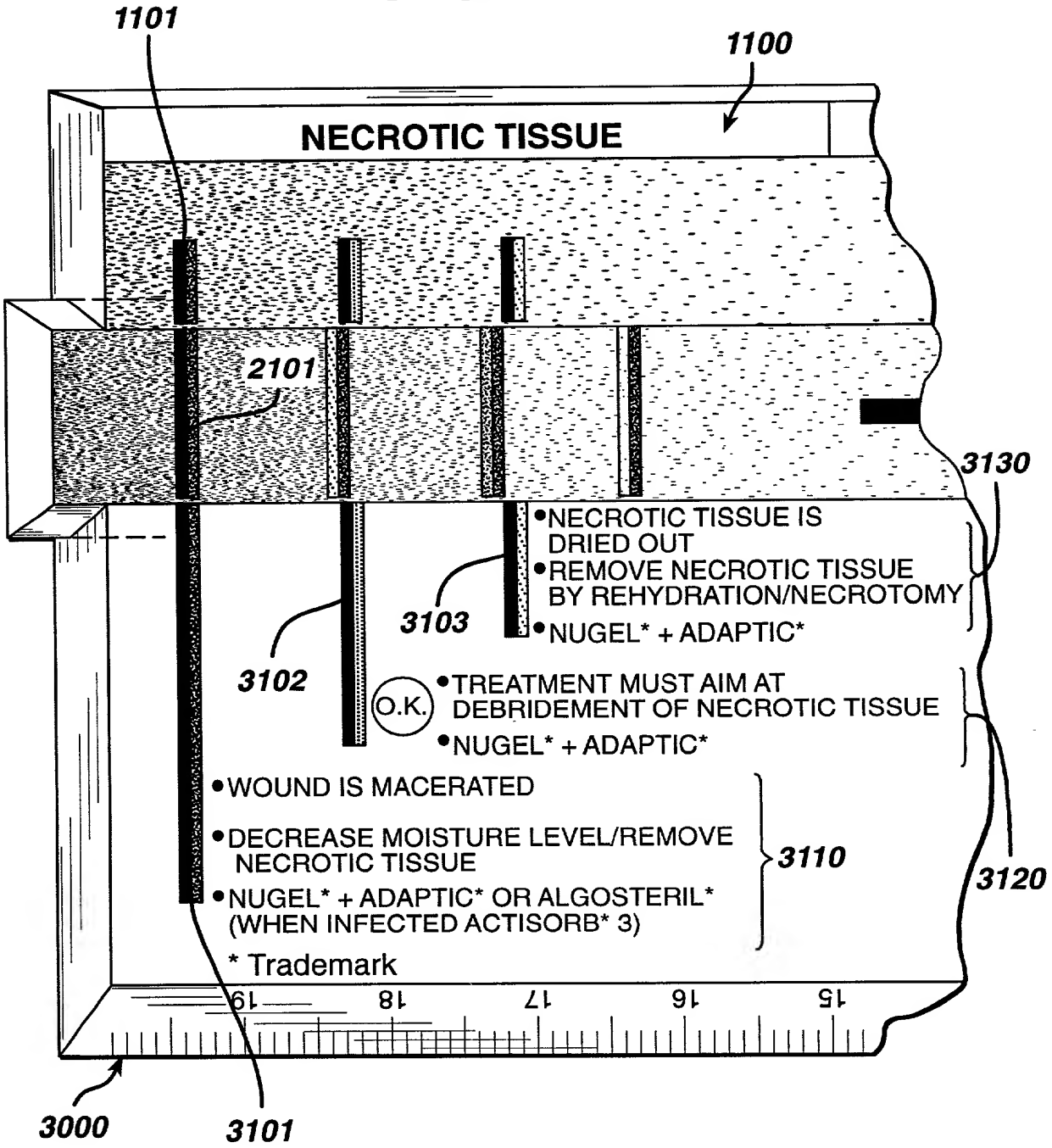

1101
1100
NECROTIC TISSUE
2101
3130
•NECROTIC TISSUE IS DRIED OUT
•REMOVE NECROTIC TISSUE BY REHYDRATION/NECROTOMY
•NUGEL* + ADAPTIC*
3103
3102
O.K.
•TREATMENT MUST AIM AT DEBRIDEMENT OF NECROTIC TISSUE
•NUGEL* + ADAPTIC*
•WOUND IS MACERATED
•DECREASE MOISTURE LEVEL/REMOVE NECROTIC TISSUE
•NUGEL* + ADAPTIC* OR ALGOSTERIL* (WHEN INFECTED ACTISORB* 3)
3110
3120
* Trademark
19
18
17
16
15
3000
3101

FIG. 3

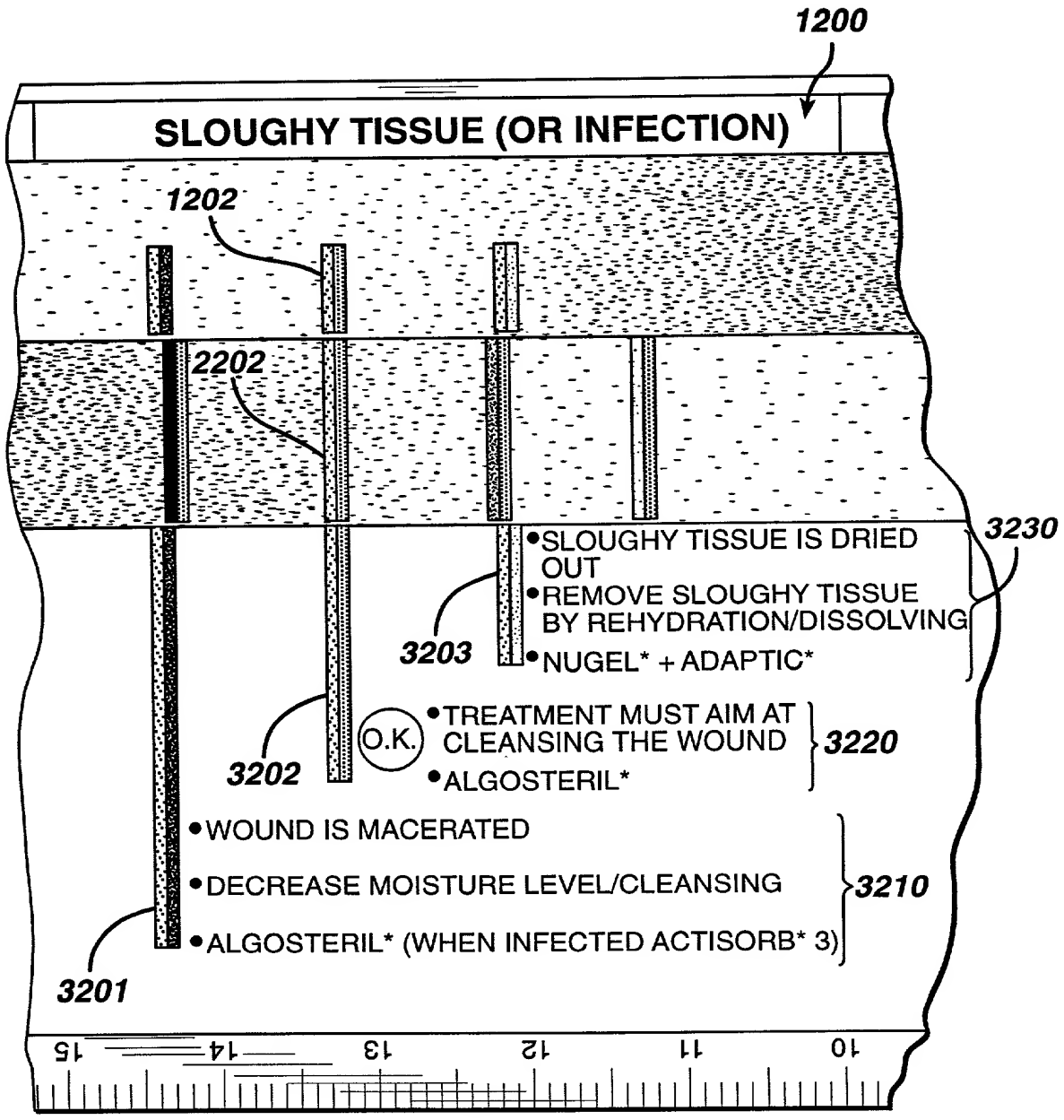

1200
SLOUGHY TISSUE (OR INFECTION)
1202
2202
3230
•SLOUGHY TISSUE IS DRIED OUT
•REMOVE SLOUGHY TISSUE BY REHYDRATION/DISSOLVING
3203
•NUGEL* + ADAPTIC*
3202
O.K.
•TREATMENT MUST AIM AT CLEANSING THE WOUND
•ALGOSTERIL*
3220
•WOUND IS MACERATED
•DECREASE MOISTURE LEVEL/CLEANSING
•ALGOSTERIL* (WHEN INFECTED ACTISORB* 3)
3210
3201
15
14
13
12
11
10

FIG. 4

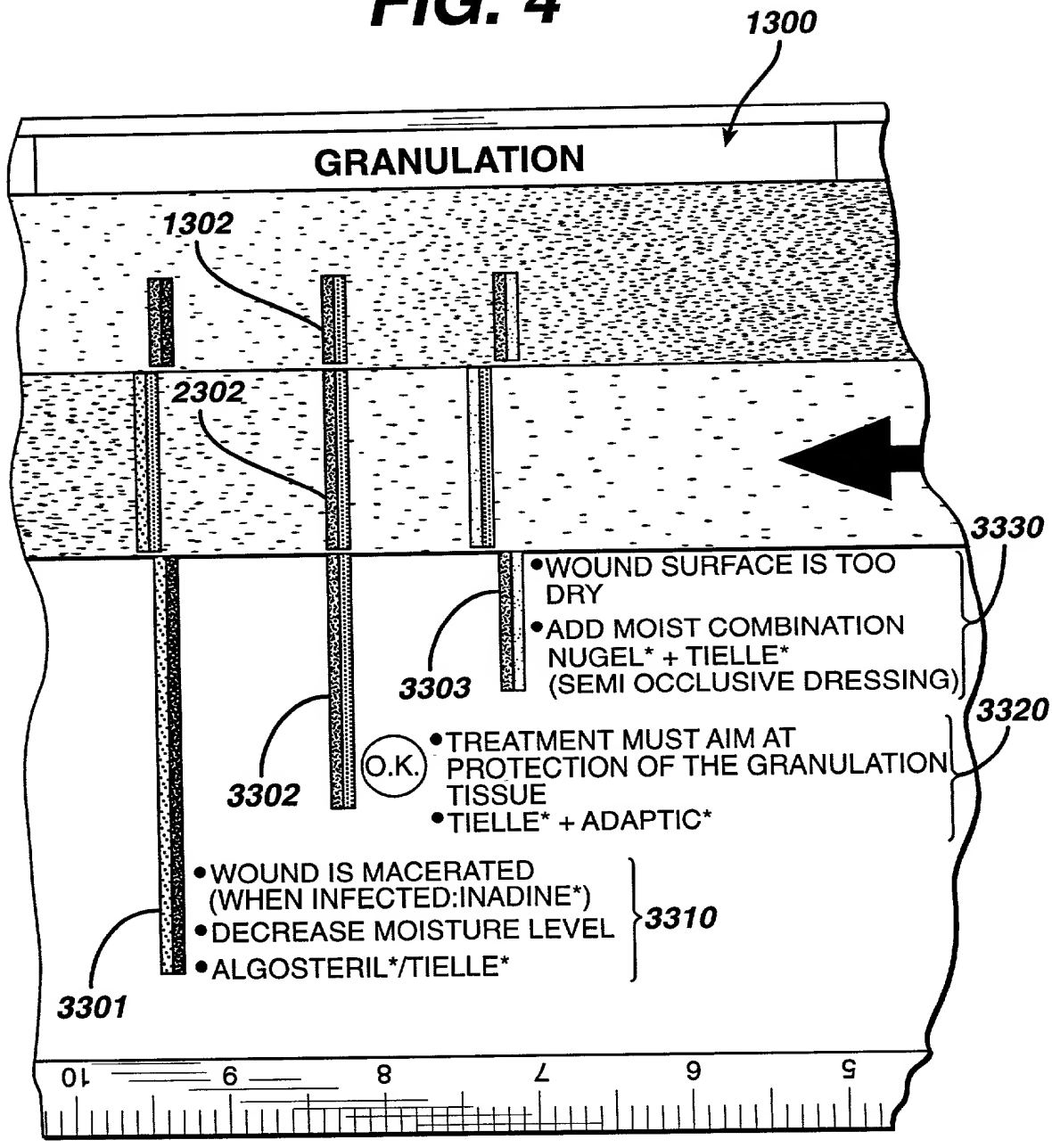

1300
GRANULATION
1302
2302
3330
•WOUND SURFACE IS TOO DRY
•ADD MOIST COMBINATION NUGEL* + TIELLE* (SEMI OCCLUSIVE DRESSING)
3303
3320
O.K.
•TREATMENT MUST AIM AT PROTECTION OF THE GRANULATION TISSUE
•TIELLE* + ADAPTIC*
3302
•WOUND IS MACERATED (WHEN INFECTED:INADINE*)
•DECREASE MOISTURE LEVEL
•ALGOSTERIL*/TIELLE*
3310
3301
10
9
8
7
6
5

FIG. 5

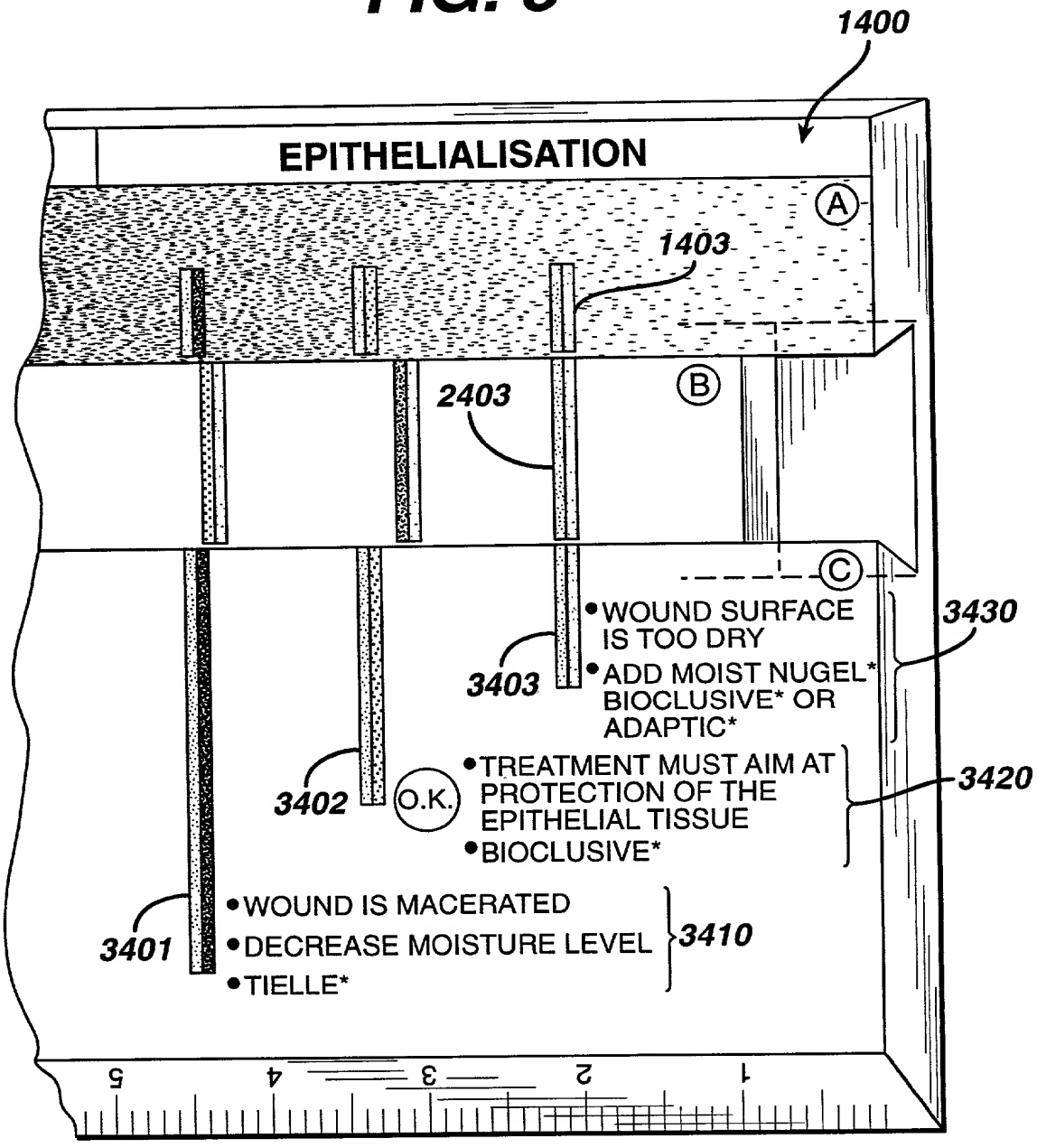

1400
EPITHELIALISATION
A
1403
2403
B
C
3430
•WOUND SURFACE IS TOO DRY
•ADD MOIST NUGEL* BIOCLUSIVE* OR ADAPTIC*
3403
3420
3402
O.K.
•TREATMENT MUST AIM AT PROTECTION OF THE EPITHELIAL TISSUE
•BIOCLUSIVE*
3401
•WOUND IS MACERATED
•DECREASE MOISTURE LEVEL
•TIELLE*
3410
5
4
3
2
1

FIG. 6 PRIOR ART

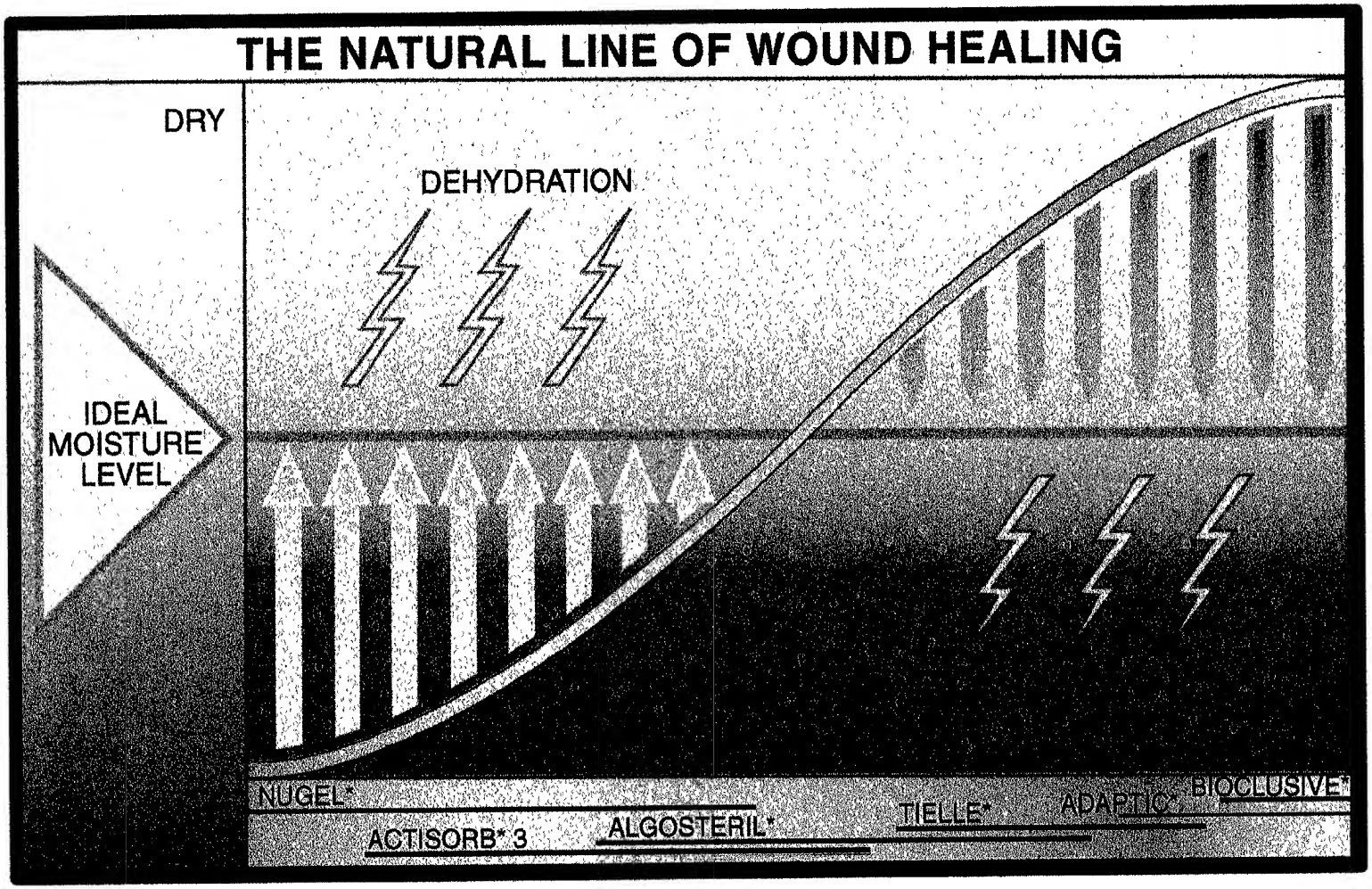
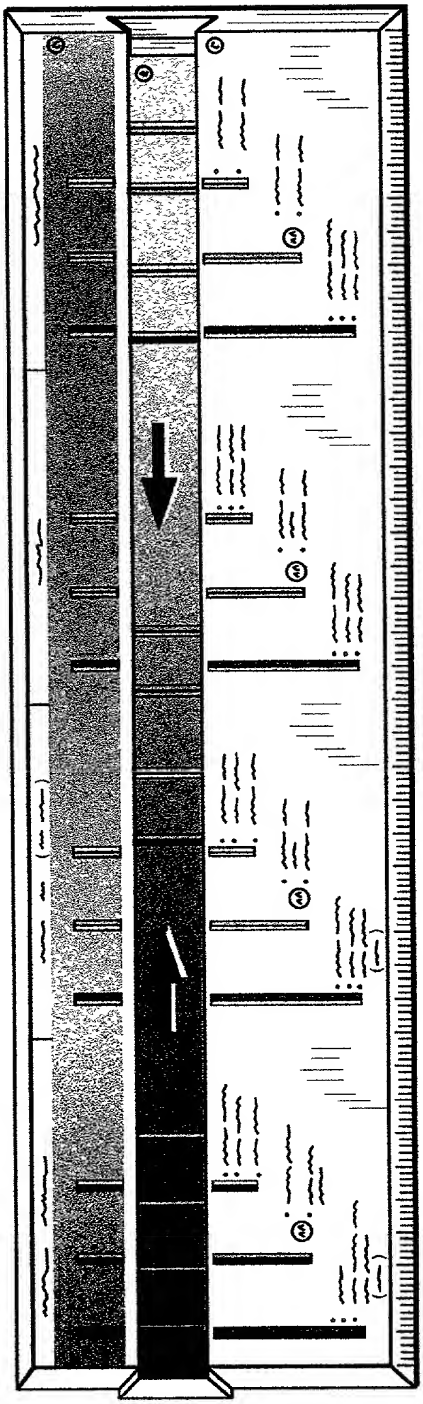


FIG. 7



DOCKET NO. JJM-475

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled DEVICE AND METHOD FOR CHRONIC WOUND CONDITION TREATMENT, the specification of which

(check one) ☒ is attached hereto.

☐ was filed on _____ as

Application Serial No. _____

and was amended on _____.
(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119 (a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate, or §365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s):

Country	Application Number	Date of Filing	Priority Claimed Under 35 U.S.C. 119
			☐ YES ☐ NO
			☐ YES ☐ NO
			☐ YES ☐ NO

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below:

(Application Number) (Filing Date)

(Application Number) (Filing Date)

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

Application Serial No. Filing Date Status

Application Serial No. Filing Date Status

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith as well as to file equivalent patent applications in countries foreign to the United States including the filing of international patent applications in accordance with the Patent Cooperation Treaty: Audley A. Ciamporcero, Jr. (Reg. #26,051), Steven P. Berman (Reg. #24,772), Andrea L. Colby (Reg. #30,194), Michael Stark

(Reg. #32,495), and Theodore J. Shatynski (Reg. #36,676) One Johnson & Johnson Plaza, New Brunswick, NJ 08933.

Address all telephone calls to Theodore J. Shatynski at telephone no. (732) 524-2498.

Address all correspondence to Audley A. Ciamporcero, Jr., One Johnson & Johnson Plaza, New Brunswick, NJ 08933-7003.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Inventor's Signature: _____

Full Name of Sole or First Inventor: Ronald Legerstee

Date: _____

Citizenship: Netherlands

Residence: Buitenkruierstraat 53

Post Office Address: 1333 EA Aimere Biuten, Netherlands